

THE CALIFORNIA MEDICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

HERPES OF THE CONJUNCTIVA, PHLYCTEN- ULAR CONJUNCTIVITIS.

BY F. CORNWALL, M. D.

THIS disease develops in the conjunctiva from roundish inflammatory points. From these points are formed nodules, upon the summit of which develops a serous fluid, constituting what is termed a vesicle. This vesicle soon ruptures, forming an excoriation, the base of which is soon covered by an opaque coating, of a grayish color. The excoriation may heal over or degenerate into an ulcer, which may become penetrating in its character. The most frequent seat of this disease is at the limbus conjunctivalis, and is very likely to complicate itself with corneal herpes. These points may occur singly, or in groups, and may be found in all different stages of development at the same time. These vesicles are so small that with the unaided eye they would escape discovery, were it not that the conjunctival arteries enlarge, and point toward the vesicles, forming a triangle, the apex of which terminates at the diseased point. This fan-shaped body always occupies a meridional direction of the globe. In severe cases, where the efflorescences are numerous, the disease loses its identity in this respect, and the whole conjunctiva

and episcleral tissue becomes deeply injected, extending down to the limbus conjunctivalis, where it abruptly stops. More or less serous infiltration is apt to exist, in the hyperemic portions of the conjunctiva, and in such cases the limbus conjunctivalis appears as a distinct ridge or welt, of a crescentic form. The disease usually occurs at the superior aspect of the cornea. In the more irritable stage, the secretion is watery, but as this condition subsides catarrhal secretions may become mixed with it. Stinging sensations are apt to precede the eruption, which disappears at its complete efflorescence. Should such symptoms continue it is probable that there is a continued outbreak of the vesicles. When there is severe pain and photophobia, it is likely that corneal herpes exists. The causes are such as would be likely to produce any form of conjunctival inflammation. It is of very frequent occurrence in mining districts from the irritating effect of giant powder, smoke, fine mineral dust, etc. In a case of facial herpes, in the region of the distribution of the frontal or infraorbital nerve, the surgeon should be apprehensive, as the disease is likely to attack the conjunctiva or cornea. The fifth nerve exerts a special influence on the nutrition of the eye-ball. Any irritation of the peripheral distribution of this nerve, may be reflected through the centers to the eye. The history of the case, is generally, that after the subsidence of the facial herpes, it may be for days or weeks, the cornea will be attacked, or increased tension of the globe may take place with absolute glaucoma.

A few months since a patient of mine whom I was treating for pulmonary disease, had an attack of facial herpes. The disease was limited in its extent, and so I dismissed it as a trifle, not thinking at the time of the probable *sequelæ*. After the facial herpes had run its course, a large ulcer appeared on the cornea, over the pupil. It was rapidly destructive in its tendency, and although soon subdued, left sufficient opacity to nearly destroy vision. Herpes of the conjunctiva has a typical course, as it has in other parts, each vesicle lasting about eight days.

~~Parmus~~^u *Parmus herpeticius* is a chronic form of phlyctenular conjunctivitis which mostly attacks the ocular conjunctiva. It is constituted of repeated eruptions of herpetic efflorescences, and occurs, principally, in persons predisposed to the disease, or in those who are exposed to influences which are productive of conjunctival irritations.

Treatment.—The life of each individual having phlyctenular conjunctivitis should be investigated, and should it be thought necessary, a change should be insisted on. Such constitutional treatment should be administered as would seem needed to overcome any dyscrasia. Such remedies as are usually termed alterative, are very often indicated. The dusting in the eye of dry calomel, or the use of an ointment of yellow oxide of mercury, is the standard treatment given by the most famous authors; but I have not been satisfied with the result. A strong solution of nitrate of silver (xl gr. ad 3j) should be painted on the part once a day, afterwards neutralizing with a salt water solution. Should there be evidence of ciliary irritation, it is best to make use of a mild solution of sul. of atropia occasionally, sufficient to subdue all pain and extra heat about the eye or orbit. It is best, in fact, in nearly every case to commence the treatment with the atropia.

BELLADONNA.

BY C. H. HOUP, M. D.

BOTH the root and leaves of the plant *Atropa Belladonna* are used in medicine, and both yield the alkaloid atropia, which is also the active principle of the plant. "An alkaloid is a name given to the organic alkalies to distinguish them from the mineral, from which they differ as regards composition and general properties; having nothing in common but their basic properties," whereas the active principle represents the original in all its physiological actions and therapeutical effect. Morphia is one of the alkaloids of opium, but it is not its active principle, for to mention but one difference, opium is more stimulating than morphia, but atropia is the active

principle of belladonna, because it is on its presence that the physiological activity of the drug depends, hence it will be seen that an alkaloid of a drug is not necessarily its active principle.

After we have decided on what is indicated in our case, we deliberate on the preparation and its mode of administration; we decide whether it be powder, pill or bolus, decoction, tincture or fluid extract, whether it be enepidermic, epidermic, or endermic; whether it be *via* the alimentary canal or per rectum, urethra or vagina. We select (if we know) the most reliable form of medicine that will produce the most rapid and certain results; we adopt that mode of administration that is most desirable under the circumstances.

The German Pharmacopœa directs that the root should not be kept more than a year, so that the powdering of the root and administering it in that form is not to be thought of. The leaves are better preserved by drying, but are no better for administration than the root. The emplastrum belladonna made from the root and resin plaster is unfashionable and little used, and could well be dropped as a preparation, as the effect produced by the plaster is more conveniently and speedily arrived at by other preparations and modes.

The extract of belladonna, the dose of which is one-fourth to one grain, is made from the expressed juice of the leaves; such authority as the National Dispensatory admits it to be of uncertain strength; there being preparations of the same drug of certain strength and action, why not drop this?

Extractum belladonna alcoholicum: the only difference between this preparation and the preceding is the alcohol; its appearance, dose, action, and uncertain strength correspond; if you prescribe one you generally get the other. Why not consign them both to oblivion?

Extractum belladonna fluidum. Dose Mj—M v; made from the root, and is one of the most efficient preparations of belladonna.

Tincture of belladonna. Dose M v—3 ss; only a dilution of the above. As most tinctures are of fluid extracts, it is not

at all times easy or convenient to concentrate, but it is very little trouble to dilute at any time. It is true the root is used in making the fluid extract, while the leaves are used in the tincture, but as before remarked, it is the presence of atropia in belladonna on which its physiological activity depends, and as the root only is used in the manufacture of this alkaloid, because it is more abundant in the root than in the leaves, it follows that this is only another reason why the fluid extract should be retained while the tincture is discarded. Unguentum belladonna made from the extract and lard, is one of those preparations that are fast going into disuse: the lard is generally rancid, and a nastier or dirtier mode of medication than ointments is not yet invented.

Atropia sulphas. Dose $\frac{1}{120} - \frac{1}{80}$ grain. Here we have the *multum in parvo* of belladonna preparations. But objection is raised to this highly concentrated form, on account of its toxical danger and the difficult division of doses. To the first I would answer that no one should handle this or any other medicine unless they fully understand its action and use; as to how atropia can be easily as well as accurately and minutely divided. I will illustrate; atropia is readily soluble in water, a solution of one grain to one drachm of water, would give you sixty doses in a teaspoon, or to recapitulate: Mj of such a solution would be $\frac{1}{80}$ of a grain of atropia and Mj dropped into two teaspoons of water and one teaspoonful for a dose would be $\frac{1}{120}$ of a grain of atropia, and so on, making any dose or any fraction of a grain with ease.

Caustic alkalies act on atropia, and ammonia is evolved, hence incompatible. Physostigma counterbalances the actions of belladonna, hence it is its physiological antagonist; and the same may be said of opium with certain restrictions, that opium will contract the pupil which belladonna will dilate; it is doubtless the principal reason for calling them antagonists, and for the same reason they were suggested as antidotes one for the other. They widely differ in action, or antagonize in other respects, as opium produces coma, diminishes the internal and increases the cutaneous secretions,

lessens the secretions of urine, and exerts a depressing action upon the lungs and heart, while belladonna tends to produce cerebral excitement, increases the secretions of the gastro-intestinal tract, diminishing those of the skin, augments the secretion of urine, and stimulates the functions of the heart and lungs.

Atropia is extremely diffusible, is rapidly taken up into the circulation, and its effects are noted almost instantaneously in the retardation of the pulse rate, followed by a quick rise in the number of pulsations. Like all other medicines which act directly through the nervous system, small and large doses of belladonna produce opposite effects, the former stimulating, the latter paralyzing it. "The first and simplest effect of belladonna in small doses is to dilate the pupil, whether it be applied locally (in which case its action may be confined to one eye), or when taken internally. Recorded cases show that a solution of atropia instilled into the ear, or a belladonna plaster applied to the side of the chest produces a corresponding dilation of pupil. The continued use of small doses produces a dryness of the throat, and a pink efflorescence of the skin resembling scarlatina; still larger doses excite a delirium peculiar to belladonna." Belladonna has a specific action on several physiological elements of the economy as the nervous system, the muscular system, the circulation, and the secretions. "Under moderate stimulant doses the number of visible capillary vessels is increased, owing, it is alleged, to the greater force with which the blood is propelled, but the individual vessels are said to undergo such a contraction at the same time that the amount of blood in the part is diminished rather than increased. The continued use of such doses, or the immediate administration of larger ones, produces general dilatation of the capillary vascular system. This vascular stasis accounts for the dryness of the mouth and the redness of the skin, but it is not quite easy to explain by its means the absence of dryness of the external integument, nor the increased secretion of urine and bile, nor the greater facility of defecation, which are effects of medicinal doses of the medicine.

The alleged hypnotic power of medicinal doses of belladonna may be referred to the diminution of the blood which it occasions in the cerebral vessels; and in like manner the insomnia, hallucinations, blindness, etc., which large doses induce, may be attributed to the hypæremia which they cause in the brain. The anodyne and anæsthetic powers of belladonna appear to be inherent, and not the indirect result of changes in the blood supply." I would not attempt to give all the indications for belladonna, but I think I am safe in asserting that it is more frequently not given when indicated, than administered in contra indications. I would not give belladonna while cerebral excitement was present or when there was catarrh of the gastro-intestinal canal.

As one of the physiological actions of belladonna is to produce dryness of the mucous membranes, nose, mouth, throat, and larynx, it is indicated in mercurial ptyalism, and the ptyalism of the pregnant state. Mj of the solution before alluded to, or $\frac{1}{80}$ of a grain of atropia administered every six hours will cause the excessive secretion to diminish or even dry up. In the pain of gastralgia and gastric ulcer, the same solution can be given more frequently and in smaller doses, for it is desirable to keep the patient under the continuous effect of the drug; the effect of a medicinal dose of belladonna lasts two hours; it is eliminated by the urine. For the relief of the vomiting of pregnancy the aqueous solution can be given, or what is often better in this disease, rectal medication can be used, and a suppository of this kind will frequently effect a cure. Opium pulv. gr. $\frac{1}{2}$, Atropia sulph. gr. $\frac{1}{80}$. Ol. Thebroma qs. for one suppository. Belladonna is a favorite remedy for overcoming constipation, it is frequently combined with nux vomica for this purpose; the extracts are used and a pill is the form in which the medicine is presented. I would use the solution of sulphate of strichnia, spoken of in an article on Nux Vomica in this JOURNAL, together with the solution of atropia; you can get the same action from the combined solutions that you can from the combined extracts, besides having a more elegant and certain preparation, to say

nothing of easier administration and quicker assimilation. Belladonna is given with benefit in acute inflammations of the air passages, in acute catarrh with profuse watery secretion, in ordinary sore throat, in that form of aphonia due to fatigue of the vocal chords, and in hysterical aphonia. For many of the diseases to which children are liable, belladonna is the remedy par excellence, as in whooping cough, and no better form for administration can possibly be devised than the solution of atropia before mentioned, Mj to thirteen teaspoonfuls of water; one teaspoonful would be a dose for a child a year old; this remedy is not adapted to all cases of whooping cough, and is most effective in the spasmodic stage and cases characterized by profuse bronchial secretion. There have been some who have boldly claimed atropia as a specific for whooping cough. Great success has been met with by a treatment after this manner: To a child one to four years of age, $\frac{1}{120}$ gr. of atropia in the morning, fasting; but one dose is given daily. The paroxysms must be watched to see if they decrease in number, if not, you have not got the proper dose (the trouble seems to lie in averaging the dose). The results that follow the proper administration are summed up thus: First, there is a steady diminution in the *number* of paroxysms; second, diminution in their *duration*; third, there is a change in the character of the "whoop" as if the vocal cords were not so closely approximated. Further, if the medicine is discontinued for a time the beneficial effects that have been derived subside.

Atropia can be administered with benefit in the paroxysms of asthma. Belladonna has had a reputation as a prophylactic against scarlatina, but belladonna has lost its reputation as a preventive of scarlatina; during the eruptive stage of this disease it is indicated when the pulse is feeble, the bodily powers depressed, and the rash is imperfectly evolved. In diphtheria, erysipelas, typhus and typhoid fevers, in various mental disorders, epilepsy, neuralgia, dysmenorrhoea, nocturnal incontinence of urine, seminal losses, cutaneous disorders as prurigo, herpes zoster, erythema, eczema, hyperidrosis sweats of phthisis,

etc., hypodermically atropia is the only preparation of belladonna used. The indications and benefit arising from the external application of the preparations of belladonna are numerous. For the relief of pain in the superficial nerves: *R* Chloroformi, spts. vini. rect. āā ʒss, atropia grs. v. *M*. *Sig*. Apply on lint to the painful part and cover with oiled silk; this may also be applied to the epigastrium to arrest obstinate vomiting. In the place of the belladonna plaster, lint wet with a solution of atropia, gr. iv to ʒj, will answer the same purpose and is more certain of action; the same may be used to arrest the secretions of milk, when used on the breast. Rosewater will be more pleasing to the patient and the solution will be quite as efficient as if common or distilled water were used. This is a much more elegant mode of reaching the end than by the application of belladonna ointment, being far more cleanly.

Bedford says, "it acts upon the blood-vessels of the uterus, as upon those of the iris, intestines, etc., causing them to contract, and consequently relieving them of their congested condition." I have repeatedly had recourse to the suppositories of the extract introduced, either into the vagina or rectum, the latter is preferable, for the blood will be apt to remove the suppositories from the vagina, and I can confidently commend it to your attention as oftentimes one of the most effectual means of arresting a menaced abortion.

GOITRE.

BY J. H. BUNDY, M. D., OAKLAND.

THIS is a specific disease of the thyroid gland, induced by the use of water percolated through magnesian lime-stone, containing the soluble salts of lime in solution. At first the tumor is soft, but it gradually acquires a firm and even a cartilaginous consistence. The characters of the swelling of the thyroid gland, associated with this morbid state, appear to be different at different stages of its existence. In the soft condition the cell elements of the gland seem to secrete a fluid of a thick, ropy, viscid gelatinous appearance; but when the

consistence increases, the hypertrophy of the cell elements is generally more obvious than the fluid secretion, its blood-vessels seem increased in size and number, and ultimately cysts become developed, in which the glairy fluid abounds. The right lobe is more often enlarged than the left. This disease is rare in children; more common in females than males, and co-exists with wasting discharges, or supervenes upon them, such as leucorrhœa, menorrhagia in females, and hemorrhoids in males. It is sometimes associated with heart disease. In fatal cases the eyes are observed to recede within the orbit after death. Vision is rarely impaired. Dilatation of the cavities of the heart is the lesion which is induced in that organ, and dilatation of the veins is the last expression of the disease.

Treatment.—The treatment for goitre has for years been generally the same—Iodide of Potassium, and Iodine applied locally and internally, and it has cured many cases. But a much better, although it may be associated with Iodide of Potassium, is the following:

R Iodide of Potassium, $\bar{3}$ ss.

Or, in its place—

Iodide of Ammonium, same quantity.

Fld. Ext. Berberis Aq. $\bar{3}$ j.

Aqua Dist.

Syr. Simp. qs. ad. $\bar{3}$ iv.

M. S.—Take teaspoonful three or four times daily.

But a good local treatment has much more effect in removing or curing it than does a general. Both combined, however, are often more effectual, though not always in my hands. The best local treatment I have ever found, is the use of Collodion, applying two good coats with a camel's-hair brush night and morning. It induces thorough traction of the skin covering the tumor in every direction, which of course, causes pressure, and the pressure absorption. Absorption thus produced is positively the most curative in these cases of anything I have ever employed, and an experience of twelve

years with it should certainly confirm one's opinion of its value as above stated.

If, after applying a few times, a scale or crust-like formation appears, it should be taken off; and this course of treatment continued until the entire disappearance of the goitre. This so far supersedes Iodine and Iodide of Potass., that they should not be used where Collodion can be had. The internal treatment best adapted has already been given, and should be followed up for weeks together with the external. The Collodion answers the same good purpose in buboes that it does in goitre. It will, if well applied, discuss an ordinary bubo in from two to six weeks. It must be kept constantly applied in either case.

ECLECTIC MEDICS.

DOWAGIAC, MICH., May 30, 1881.

EDITORS CAL. MEDICAL JOURNAL:—The State Eclectic Medical and Surgical Society held a successful meeting at Lansing, on May 23d and 24th. Twenty-six old members were present and fourteen new members were added to the list of active members, as follows: J. C. Bostick, New Troy; A. B. Conklin, Manchester; B. J. Daniels, Edmore; Willis Doolittle, Morgan; W. W. Easton, Dowagiac; D. W. Forsyth, Dowagiac; John Fowler, Victor; J. D. Minard, Imlay; Geo. Newton, Vicksburg; J. C. Parker, Ypsilanti; A. B. Way, Allegan; B. E. Wheeler, South Wight; Geo. L. Whitford, Coldwater; J. D. Williams, Fife Lake. Membership at close of meeting, 74 active and 12 honorary.

Interesting papers were presented by Drs. L. S. Walter, Mosherville, on "Biliary Calculi;" Wm. B. Church, Marshall, on "Colle's Fracture;" J. D. Kergan, on "Notes on Gynecology;" address by the President. These papers and other subjects were discussed at length by the Society.

The following officers were elected for the ensuing year: President, L. A. Howard, Litchfield, (re-elected); 1st Vice-President, Wm. B. Church, Marshall; 2d Vice-President, S. S. Stearns, Dryden; 3d Vice-President, E. M. Conklin, Tecum-

seh; Secretary, H. S. McMaster, Dowagiac, (for 2 years); Treasurer, I. R. Dunning, Benton Harbor; Censors for two years, Drs. J. D. Kergan, Detroit; J. Goodenough, Clarks-
ton; S. C. Lacey, Greenville.

The Secretary reported \$279.35 received during the last fiscal year, and the Society out of debt, with 83 cents in the treasury. Dr. McMaster moved the adoption of the following:

Resolved, That the Committee on Legislation be instructed to urge the Regents of the University to abrogate all rules in the Department of Medicine and Surgery that discriminate against Eclectic Physicians and the diplomas of Eclectic Colleges.

After discussion the resolution was adopted by unanimous vote. A message being received from the Hon. J. H. Hitchcox, who had charge of the Eclectic University bill in the House of Representatives, that that bill was made the special order for half-past three on Thursday, the 24th, the Society adjourned at that hour to Representative Hall. On re-assembling, the Chairman of the Legislative Committee reported the measure defeated in the House of Representatives, 36 yeas to 43 nays. It had passed the Senate on April 14th.

The following were elected delegates to the National Association to convene in St. Louis, Mo., June 15th: E. M. Shaw, L. A. Howard, John C. Bostick, C. H. Lamoreux, J. D. Minard, Wm. B. Church, H. S. McMaster, S. C. Lacey, V. A. Baker, Wm. Merchant, O. C. Joslen, S. S. Stearns, I. R. Dunning, R. Winans and J. D. Williams. The Delegation was authorized to fill any vacancies in their body by any members of the Society who may be present at the meeting. Detroit was selected as the place for holding the next annual meeting, which will occur the last Wednesday in May, 1882.

H. S. McMASTER.

MEDICAL THOUGHTS.

BY C. H. HOUP, M. D.

THE medical diet of our minds is mostly composed of reading which relates of experience and observations made from clinical notes, but the experience of county hospitals is not

always applicable to private practice; the life and surroundings of patients being so very dissimilar that the treatment proper and successful in the one case, would not be applicable in the other. The knowledge gained from clinical study in the hospital is important principally to draw conclusions from, and to note the response of symptoms to treatment. The treatment of the ignorant, poor, dirty, ill-fed and badly housed, must differ from the educated and refined, in that the requirements are different to meet the surroundings. Do our teachers always draw attention to these facts? Are we not too often supposed to have common sense, and too seldom reminded that we must use it? The physician must think for himself, and draw his conclusions as much in the light of his own experience as from others. The habit of independent thought comes slowly to most, but unless practiced and encouraged, never asserts itself. Do we ever meet two cases of the same disease exactly alike? Can we ever treat the same disease twice without varying the treatment? Celebrated teachers and authors say that nothing can be done to shorten or abort disease under any circumstances; that all diseases, including pleuritis, must run their own course, and all we can do is to conserve the natural forces of the system. And then, if the patient has sufficient vitality, he gets well, if not, not. And is this the result of the labors in the science since the days of Galen and Hippocrates? I do not believe it. Would it not be well to strike from existence all generic names of disease? Are they not mostly calculated to mislead? Names are nothing; symptoms and conditions everything in the treatment of disease.

In many cases, I might say in nearly all, there is a space of time in the commencement of the attack, when the system will respond to opportune medication, and should we not take advantage of this golden opportunity to get rid of at least part of the poison that is circulating in the blood and destroying the life. I will not deny the truth of the assertion that no one can demonstrate to a certainty that he has aborted or cut short a disease, for he does not know what it would have

been if left to itself; but the strong conviction that it has and can be done, pervades the minds of many, and it is only their modesty or the fear of ridicule for presenting a theory generally unadmitted, that prevents them from giving to the world the experience that would go far towards establishing the fact that disease can be shortened. I do not believe that when we fight disease our warfare should always be defensive; a vigorous attack with a flank movement will oftentimes give surprising results.

THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.

THE above-named Society held their semi-annual meeting in the large hall of the California Medical College, Oakland; the adjournment not taking place until the afternoon of the second day, June 15, 1881.

M. F. Clayton, M. D., of Sacramento, President of the Society, presided. The first day was nearly consumed in reading the minutes of the last annual meeting and other routine business. Several new members were added to the roll. Dr. Sayre, of Corry, Pa., was introduced to the Society, and made some very pertinent remarks on liberal medicine.

Dr. D. MacLean, read an interesting paper on Chloral Hydrate in Labor.

Dr. Herzstein gave a short lecture on Cerebral Localization, illustrating his remarks by a chart.

The second day was devoted almost entirely to the reading of papers and the discussion of them. Dr. Coleman read a paper on Hysteria, and Dr. McKee one on Catarrh of the middle ear. Dr. Clayton gave a history of a case in practice of internal hemorrhage and subsequent delivery of a seven-months' still-born child.

The Chairmen of the Committees on the various subjects for papers remain the same, excepting Anatomy, Surgery and Physiology. Dr. Case was appointed to fill the vacancy caused by the resignation of Dr. Crowley. Members of the Society are requested to report at an early date as possible to

the Chairmen of the various committees the subject of their papers for the next annual meeting of the Society, which will occur in San Francisco, December 13, 1881. Any information regarding the Society will be cheerfully furnished to members by the Secretary.

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EDITORIALS.

CHLORAL HYDRATE IN LABOR.

MANY physicians object to giving any medicine to relieve pain during labor, claiming that it is a natural process, and should not be interfered with. Some in their zeal, go even so far as to say, that the alleviation of pain at this period destroys a mother's love for her offspring. This is simply absurd. If it be true that a woman loves her children in proportion as she suffers in giving them birth, we would be justified as physicians in increasing her suffering, as there should be no limit to a mother's affection. Fortunately, a mother's love does not depend on suffering. It is a principle that lies deeper in the human breast, and in no way connected with the pangs of labor.

Our mission is to give relief. It is as much our duty to relieve suffering in the parturient chamber as under any other circumstances. The relief of pain, however, is not the only question to be taken into consideration. The agent used must be safe, producing no bad effect on the mother or child, and if it does not promote labor, it at least must not retard its progress.

The preparations of opium and chloroform are generally used, but they are subject to objections. Opiates, if given in sufficient doses to relieve pain, retard labor, and the child is liable to be still-born. Chloroform, while it annihilates pain, has many disadvantages. It is not always safe, besides it produces nausea and vomiting, and may be followed by severe post-partum hemorrhage.

A desirable agent in obstetric practice, is one that is safe, blunts sensibility, increases uterine contractions, and shortens labor. We have such in chloral hydrate. For the teasing, grinding pains which many women, especially if of a delicate nervous organization suffer, in the first stage of labor, I have been in the habit for the past few years of giving chloral with the happiest results. It relieves the pain and gives rest, without interfering with the progress of labor. Opium given in the same class of cases, will give relief and rest, but while under its influence no progress is made.

It is also an invaluable agent in rigidity of the os. Cases have come under my observation of women in labor for hours without making but little advancement, who after taking a few doses of chloral, the parts began to soften, the os to dilate rapidly, and labor brought to a speedy termination.

So efficient and safe has chloral been in my hands, that I now do not think of attending a case of obstetrics without it. I give it in all stages of labor, and in sufficient doses to control pain. I generally carry a saturated solution of which a drop represents a grain. For the first dose I give twenty drops or grains well diluted, followed afterwards by ten drop doses, repeated every half hour, or as often as to maintain the desired effect. Usually it is not necessary to give more than a dram during the whole period. If the drug produces nausea by the stomach, it may be given by the rectum, either by enema, or suppository. For an enema there is no combination better than Griffith's formula. The required quantity of the drug is mixed with a raw egg thoroughly beaten, to which a little warm milk is added. This acts rapidly and produces no irritation. If a suppository is preferred, the required quantity can be added to equal parts of wax and cocoa-butter.

I wish the members of this society to give this matter a fair consideration, and give the result of their experience and investigation through the columns of the CALIFORNIA MEDICAL JOURNAL. Let no one condemn the agent without a thorough trial. If complications should arise, such as nausea

or hemorrhage, we must not be too ready to blame the medicine, for these frequently arise from other causes. I believe chloral to be safe, valuable, and efficient if given in the doses I have directed, and not carried to such an extent as to produce complete anæsthesia.

SELECTIONS.

A CASE OF BONY CLOSURE OF THE NOSTRIL; REMOVED BY THE BURR-DRILL.

Being an Oral Report of a Case at the State Medical Society, which was ordered to be Printed in the Transactions.

BY OREN D. POMEROY, M. D., NEW YORK.

MR. H——, aged thirty-five years, has had a total obstruction of his right nostril as long as he can remember. As this nostril is catarrhal, the considerable secretion resulting is a very great source of annoyance to him, as it can only be removed by syringing. His right ear has also suffered somewhat from a chronic catarrhal otitis-media, aggravated very likely by the non-passage of air across the mouth of the Eustachian tube in its exit from the nostril. I found some polypoid material about the obstruction, which was removed by forceps. Near the back part of the nostril my instrument was arrested by a solid wall, stretched across the passage at right angles to its bony axis; it could not be broken through by the utmost pressure.

As the mucous lining of the nostril was considerably swollen, it was impossible to get a view by any system of illumination, and I depended wholly on the sense of feeling to determine the topography. The finger was passed behind the velum, and, by crowding very hard, its tip could just touch the obstruction, which appeared the same behind as in front; its thickness did not seem great, as I estimated by the distance the probe passed into the nostril before reaching it. There seemed no doubt but that there was a bony growth, extending from the inferior turbinated bone across the nostril, and

completely closing it. I then determined to remove it, or make a sufficient aperture to allow the air to pass freely through it. The dentist's lathe occurred to me as a very appropriate instrument to use, but the drills coming with any in the market were too short, it being impossible to reach nearly five inches into the nostril with one of them. A drill was according made to order, having a chisel-like point, with the sides for a short space made quadrilateral, as I was told it would then bore laterally. The length of this drill was four inches; its chisel-like extremity was one line in diameter. A hole through the bony wall was easily made by this instrument, but it could not be enlarged sensibly.

I then had constructed what is known as a cross-cut burr-drill, the cutting being rather coarse, to diminish the liability to clog; the cross-cutting being also for the same purpose. The burr portion of this drill was almond-shaped, and about two lines in diameter at its widest part; length about one and three-fourths its width.

This instrument readily made its way through the bone, boring as well laterally as in front, and in three sittings I succeeded in making an aperture sufficiently wide to allow of moderate breathing through the nostril, and the ability to clear it thoroughly and comfortably by blowing the nose. There was some difficulty in passing the drill up the narrow nostril, as it inclined to catch in its swollen and soft lining. This difficulty was obviated by filling the interstices of the drill with vaseline, when it was passed with comparative ease. No ether was given, and the operation was not excessively painful; only a moderate amount of hemorrhage. By the swelling of the soft parts, the nostril was closed for a few days after each operation, as might have been expected. It has been recommended to remove the whole of these bony growths by cutting or drilling *around* them, and bringing them away *en masse*. In this case it seemed clearly impossible to do so. As the distance from the anterior part of the nostril to the obstruction was fully five inches, it made it somewhat more difficult to operate on that account. As to

the cause which gave rise to this growth, it is difficult to state, as the patient gives no history of any previous pathological process whatever.

MALARIA IN SURGERY.

VERNEUIL (*Journal de Médecine de Bordeaux*, May 1, 1881) claims that it has been demonstrated: First, that the malarial poison engenders directly a certain number of external affections, apparently of spontaneous origin, but in reality, symptoms of malarial poisoning. Second, that it influences generally in morbid manner, the progress and termination of intercurrent and pre-existing surgical affections. Third, that it acts very frequently and strongly on the reparative progress of accidental or operation wounds, interfering with or arresting their progress; that it creates by means of these wounds, grave complications. Fourth, that traumatism in its turn exercises very often an action on malarial infection, it awakens or aggravates it, and it is not rare to see these two morbid conditions work together in a vicious circle to the great damage of the patient. These conclusions of Verneuil, while perhaps too strongly put, seem not without value in guarding against certain possibilities of malarial infection in surgical cases.—*Chicago Medical Review*.

THE GERM THEORY.

ACCORDING to some reports, every suggestion of this subject at the last meeting of the American Medical Association seemed to act like a red rag is said to do on a wild bull, on some of the older members. At least one reason can be seen for this antipathy or apathy, for on but few medical topics has there ever been more ink wasted and more nonsense produced, than in the discussions incited by germs. The nonsense seems to come much more profusely from the opponents than from the champions of the germ theory. Dr. E. F. Brush, in an article remarkable for its violet-like modesty (*New York Medical Record*, May 21), demolishes the altars of those false

deities, bacteria, and degrades them from masters of the situation to mere subservient parasites, satisfied with the spoils furnished them by disease. With evident self-satisfaction the author deprives the bacteria of all their dignity and assigns them their proper rank of insignificance, though it is to be feared he has been just a trifle too sweeping, since he evidently has never been on any terms of intimate acquaintance with the enemies he assails. But the opponents of the germ theory have always held the view that the weapons of criticism can be best wielded in the absence of any prejudice created by a too intimate knowledge of the facts on the other side, as is well illustrated also in an editorial comment in the same number of the *Record*, on Pasteur's hydrophobia researches. The illustrious author, after being patronizingly commended for some other work he has done, is unjustly accused of hasty conclusions as regards the germ origin of the disease. In reality Pasteur is in about the same position as Darwin, who has really done less theorizing and more in the way of collecting facts, than any opponent or upholder of his theory. Pasteur himself had from the very start criticised, rather skeptically, artificial transmission of rabies, and cannot be said therefore to have been forced to withdraw any of his statements on this subject.—*Chicago Medical Review*.

RESECTION OF THE STOMACH.

RESECTION of the stomach has, up to the present time, never been successful; but the operation has at last been performed with the most satisfactory results. On January 29th, Professor Billroth removed the pylorus and about one-third of the stomach for carcinoma, and the patient has made a good recovery.

In his public clinical lecture on the 31st, Professor Billroth gave an account of the case, as well as a short history of the operation and the experiments that led to its successful performance. The substance of this lecture appears in the *Wiener Medizinische Wochenschrift*, of February 5th.

The history of the operation is as follows: In 1810 Merrem published a work on this subject, giving the results of his experiments on dogs, two out of three having survived the extirpation of the pylorus and sewing together of the stomach and duodenum. In spite of these results, the operation was not attempted on man, and, though surgeons of different nationalities investigated the subject, no material advance was made until Lambert discovered the true method of uniting all wounds of the intestinal tract: namely, apposing the serous surfaces. After this, recovery after sewing up of intestinal wounds became more frequent.

In 1871 Billroth excised a part of the esophagus in a large dog, the operation being followed by recovery. Czerny first performed this operation on man with good results. This was shortly followed by the experiments of Gussenbauer, Winwarter, Czerny, and Kaiser on different portions of the intestinal tract in dogs. These operations were very successful, and in one case the whole stomach was removed, and the esophagus and duodenum united with good results.

In 1877 Billroth operated on a gastric fistula following abscess, by opening the abdomen at that point, excising the thickened, adherent edges of the gastric opening, sewing up the wound, and returning the stomach to the abdominal cavity. The patient made a good recovery.

In 1879, Pean, of Paris, first resected the pylorus for carcinoma in a patient who was greatly exhausted by the disease, and who died on the fourth day. Catgut sutures were used.

The present case was that of a woman, forty-three years of age, who had had the usual symptoms pointing to a cancer of the stomach for more than a year. The patient was very anemic and weak, having been able to retain only very small quantities of sour milk for several weeks. A freely-movable tumor could be felt in the epigastrium, through the thin, flaccid abdominal wall, lying slightly to the right of the median line.

The operation was performed in the small room always used for large abdominal operations, the temperature being high.

and the air moist. The stomach was washed out and a nearly horizontal incision three inches long, was made over the tumor, which was drawn out through the opening. It was found to involve the pylorus and about one-third of the stomach.

First the greater and then the lesser omentum were ligated and cut through close to the tumor, and the whole stomach being drawn out of the abdominal cavity, was divided, the cut beginning at the lesser curvature and passing about half way through the stomach, half an inch from the infiltrated portion. The duodenum was incised in like manner, and six trial sutures were passed through the cut surfaces, but not tied. It being found that the edges could be easily brought together, the incisions were continued through both stomach and duodenum, and the tumor thus wholly removed.

The oblique wound in the stomach was then sewed up, beginning at the greater curvature, until an opening was left which corresponded in size with the duodenum, which was then stitched into the opening. Lambert's stitch was used throughout, fifty-four carbolized silk sutures being applied.

The stomach was then washed with two per cent. carbolic solution, and the whole returned into the abdominal cavity, which was closed in the usual manner. A carbolized gauze dressing was applied, which was not removed until the sixth day. The spray was not used. Hemorrhage throughout the whole operation was very slight, and no blood or fluid from the stomach was allowed to get into the abdominal cavity, warm carbolized compresses being packed behind the stomach while it was open.

The mass removed measured on the greater curvature five and a half inches; the pyloric opening allowed only a large probe to pass.

Since the operation there have been no unfavorable symptoms; no fever, no vomiting, scarcely any pain; in fact, the patient has been much more comfortable than for weeks before the operation. The external wound has entirely healed. Wine and peptone enemata were given for two days, and since then only wine. By the mouth, only ice for the

first twenty-four hours, then milk in small quantities. On the eighth day *bouillon*, with eggs, and later meat and apple *purees* have been taken without bad effect. Now, on the fourteenth day, the patient is allowed to sit up, and in a day or two will be able to take meat and other solid food.

The success of this operation marks a great advance in abdominal surgery, and enlarges still further the field of the surgeon. The technical difficulties of the operation are not greater than in many other cases; even the difficulties of diagnosis are now much lessened when the abdominal cavity can be opened and its contents examined with almost no danger to life, and the methods of illuminating and exploring the interior of the stomach are being daily more and more perfected.

The operation may not always be successful or applicable to all cases, but it will relieve, even if it does not permanently cure, many patients whose sufferings are generally intense, and who have absolutely no hope of cure by the means hitherto employed.—*Vienna Correspondent of Boston Medical and Surgical Journal.*

FRACTURE OF THE VERTEBRA.

BY PROF. MILTON JAY, M. D., CHICAGO.

IN January last, a young man, aged twenty-four years, from Canon City, Col., called upon me to see what, if anything, could be done to relieve his case. Two months previous, while working in a well some ten feet underground, while in a position of stooping or bending the body forward, the earth caved in upon him, striking him upon the shoulders, bending his body forward so that, while he was in a sitting position, his head was forced between his knees, breaking, dislocating or injuring the vertebra, in the dorsal region, and producing a remarkable deformity, some five of the dorsal vertebræ were involved in the injury. The body was bent forward, and fixed at an angle of forty-five degrees, with the five inferior dorsal vertebræ forming an arch, the center of which projected backward three inches beyond their

natural position; just the exact condition of the body of the vertebra and of the intra-vertebral substance, I was unable to determine; yet enough could be learned by examination to warrant the conclusion and diagnosis that the bodies of two or more of the vertebræ were fractured and displaced, and probably a partial dislocation of others with fracture of transverse processes. The injured vertebræ had become fixed in their abnormal positions, so that very slight motion could be produced in the region of the deformity. There had been after the injury, inflammation and pain, all of which had subsided.

By placing him in a recumbent position, and using extension and counter-extension from the two extremities, and gentle pressure upon the protruding portion, I found that *slight* motion could be produced, although seemingly fixed. I was fearful of the result should I succeed in breaking up the union and ankylosis of the vertebræ, for fear of injury to the spinal cord. I had an apparatus manufactured for him, similar to the brace generally used in curvature of the spine, consisting of a *firm*, well-cushioned pelvic pad; to this was attached two pieces of spring steel with *crutch* ends, one for either side, extending from the pelvic pad to the axilla, so as to lift the entire weight of the upper extremities and head, relieving the injured bones of all pressure, with two other pieces of steel, well cushioned, extending from the pelvic pad on either side the spinal column to the cervical region, made fast with elastic straps to the shoulders. These upright pieces were so shaped that, when well padded, they made constant pressure upon the projecting vertebræ. This, with some small straps and pads, constituted the apparatus. After wearing it one week, there was slight improvement, which continued, and at the end of two months the deformity had almost entirely disappeared. I discharged the case, with instructions to wear the apparatus as a support, and aid to still further improvement, for some months. There was every prospect of a perfect and complete recovery. I have just heard from the case to-day; he is doing well. I have been

asked why I did not apply the plaster-of-Paris jacket. In my opinion, I could not have relieved the deformity with that appliance. I might have prevented it from growing worse, but in this case not only was it necessary to relieve the injured part of all weight or pressure of the upper extremity, but also to make and keep up constant pressure on the protruding vertebræ, and in this way was able to retain all the advantage gained, and the result was a success.—*Chicago Medical Times*.

YELLOW FEVER.

BY E. HALSEY WOOD, A. M., M. D., HERSEY, MICH.

YELLOW fever is another of the "curious" and "singular" diseases which remains an unsolved problem of medicine. It is a disgrace to the so-called science of medicine that with every opportunity to investigate and elucidate its nature, its true cause is still enshrined in mystery. Their Eminences attribute it to a poison in the blood, but they are "barking up the wrong tree." (This is not dignified I know, but it is expressive and emphasizes a fact.) They are on a still-hunt for a poison in the blood. This poison they fancy is real. Let us humor the fancy. It consists of myriads of minute demons who exist in the blood. Zymosis is the mother of these demons. She pervades every situation in which the demons can breed and thrive, but especially does she relish the blood. Let one of the demons find entrance through the air passages to the blood and zymosis enters too, and begins to breed more demons. She brings them forth with the rapidity of thought, until in a short time the blood is populated with myriads of them. Each demon straddles a corpuscle and goes racing up and down through the vessels "raising Cain" with the circulation. These demons in their fury, gallop their steeds (the corpuscles) along so rapidly that the blood gets heated up. They are fiery devils and enjoy the heat. They get warmed up to the work and drive the faster, and when the blood gets red-hot they proceed to fortify themselves and block up the avenues so they cannot be driven out. A lot of them attack

the kidneys and they drive the swollen corpuscles into the capillaries and pile them up and jam them down, and at length that outlet is blocked up. The doctors look very grave at this and shake their heads and say: "Suppression due to the virulence of the poison." If they could only see the glee-ful little demons dancing and capering around they would have a different idea. Another lot attack the stomach but the vessels here are too delicate, and yield to the pressure and burst. The blood exuded from the ruptured vessels is vomited and again the doctors look grave and shake their heads and say: "Black vomit." They think the poison can be found in that, and one of them drinks some of the vomit, but it is harmless, for the demons have escaped from it because the blood is no longer in motion and they cannot gallop their steeds up and down in it. Another lot of demons attack the nerves and play hide-and-seek among the nerve-cells, which makes the nerves ache and fairly howl with pain. The demons laugh at this until their sides ache and little tears run down their cheeks.

Meanwhile the doctors are not idle. They send other demons into the blood with warrant to throttle, strangle and drive out the first. The work gets poorly done, and at length nature, finding her handmaid, science, a poor stick, rallies her forces and does the business by dispossessing and eliminating the demons herself.

These demons do not like cold, and presently a frost comes and they depart to a tropical climate, except those who linger too long and get untimely nipped. They return to their home from which they have only come on an excursion.

Meanwhile the job of catching some of these demons has become a national affair, and the National Board of Nincom-poops is authorized to catch any amount of them. It is satisfactorily shown that these demons have a substantial existence, for nothing else could cause such a fever in the blood. This is an unanswerable argument. But the hunting of these demons being an expensive business, money is needed for the purpose. The money is forthcoming, and an Eminence

is dispatched to the exotic country where the demons dwell. He searches everywhere, sifts the atmosphere and analyzes the earth, the water and the blood, but does not bag a demon. After many months spent in the useless hunt he returns and says so. The president of the Board of Nincompoops says it is a great pity, for if he had only caught even a single little one and fastened him on a piece of glass so that we could exhibit him, we might get another appropriation to build our frost ship, for the demons are afraid of frost. But now we will have to depend on paper pellets and quarantine. (Quarantine is a great hulking fellow who stands at the mouth of water-ways—the demons travel by water—and shoos them away.)

This fable teaches that the asses of the profession are usually selected to be members of boards of health. These fellows appear to the eyes of ordinary mortals to be dignified, erudite, and abstruse. When they are probed, however, it is found that their dignity is the thin varnish of their arrogance; their erudition consists of the borrowed covering of their asininity and their shallowness is exhibited in the results of their observations, which show that they only examine the surface of things.

They are "barking up the wrong tree." The existence of a poison in yellow fever is assumed when it would be more logical to assume its non-existence. This poison is a chimera, a creature of the imagination begotten of ignorance and superstition. The light of science is indeed but a rush-light if it cannot dispel the darkness that surrounds the nature of this disease. Putting aside all idea of a poison, let us see what illumination of the subject will proceed from a penny dip.

Yellow fever is not a fever. (This sounds dogmatic enough, but not more so than the enunciations of writers on medicine in general. Indeed, I find them mostly dogmatic.) The very name is a misnomer and misleading, and shows that medical science has made no progress in this particular since the days of Galen. He defines fever to be *calor præter naturam*, and the incorrect definition holds good to-day.

Yellow fever is a hyperthermy. Hyperthermy is one thing; fever is another. In hyperthermy the ganglia, the sources of normal heat, are depressed. All calorification of the body is due to the action of the nervous system. But the ganglia being rendered inoperative by reason of the depression, the law of compensation steps in and the burden of calorification is thrown upon the cerebro-spinal portion of the nervous system. This law means simply that when one organ is disabled the burden of its function must, perforce, be assumed by its fellow. Here the burden of heat production is cast upon the cerebro-spinal nerves, and the governor of the heating apparatus being out of gear, the caloric generated is excessive and irregularly distributed. Of course, to produce this effect, the nerves have to exert an undue amount of force. In other words, hyperthermy is due to hypersthenia of the cerebro-spinal nerves, and *per contra* fever is due to hypersthenia of the ganglia. The theory will hold water. For hyperthermy can be prevented or banished not by an antifebrific but by an anti-hyperthermic remedy, that is, by an agent which restores the sthenicity of the ganglia and produces co-sthenicity between the two divisions of the nervous system, whereas this remedy has no control or influence over the febrile condition. And this proves the theory to be true.

Yellow fever is a disease the chief characteristic of which is general idiopathic passive congestion, and this condition of the blood in its relation to the containing vessels is due to general gangliasthenia. A single prodromic symptom of the disease interpreted by the light of an emotional expression gives the location of the congestion, and points out the kind of gangliasthenia to which the congestion is due. Blushing, caused by the feeling of self consciousness or the emotion of shame, produces a temporary diffused redness of the countenance. The circulation of blood temporarily impeded in the arterioles, accounts for the rosy suffusion of the face. The pathology of a blush is evanescent, arterious congestion. In yellow fever a bright scarlet hue spreads over the cheeks—a permanent blush which as the disease progresses changes to a dusky pur-

plish-red color. This flushing of the face is due to arterious congestion. All idiopathic passive congestion is due to gangliasthenia, and the congestion of yellow fever being arterious must be ascribed to arterio-motor gangliasthenia. In the incipency of the disease the condition is mild, and when the disease is fully formed it becomes acute. So that in the stage of complete development yellow fever may be stated to be acute general arterio-motor gangliasthenia *cum* icterus. The conjoined icterus being due to the general condition is added to the name to denote the particular disease and to distinguish it from others of the same character, but which show differences of feature. Thus "milk sickness" could be called acute general arterio-motor gangliasthenia *sine* icterus, for the two diseases are identical except in this particular of the jaundice.

Sunstroke may be instanced as the type of the ganglionic diseases. Cholera will then stand at the head of the hypothermies and yellow fever at the head of the hyperthermies. With exchange of environment these two diseases are almost interchangeable. Thus, if the individual in whom yellow fever is developed at Havana were in Calcutta, the disease would assume the shape of cholera. It goes without saying then that the environment is the cause of this disease as well as of cholera. Yellow fever and cholera are in some respects the converse of each other. In the one the serum of the blood passes out and is ejected *per anum* while the corpuscular portion remains in the vessels. In the other the corpuscular part of the blood is ejected *per orem* while the serum is left to circulate and gives the "gaseous" pulse of the disease.

The consecutive fever of cholera is a hyperthermy to which if icterus were added it would be almost identical with yellow fever. This denotes in some measure their interconvertibility. If it were possible in yellow fever to shift the depression from the arterio-motors to the veno-motors, the disease would without doubt be converted into cholera, and *vice versa*. This is not "an adumbration of the truth" (Beard), but is truth itself shining out clear and bright through the clouds of error.

It is unnecessary to trace out the symptoms of yellow fever and suggest a plan of treatment adapted to the indications, because, if the single remedy herein recommended be employed at the proper stage of the disease, it will never develop into any virulent form.

A number of years ago some physician—name forgotten—observed that the excretions in yellow fever were highly ammoniacal, and hence he deduced that ammonia in any shape was inadmissible in the treatment of the disease. The observation is an undoubted fact, but the deduction is wrong. The body is in some sort a laboratory and its varied products are in great measure the result of chemical action, especially when vital processes are perverted. Excess of ammonia in yellow fever as well as in typhus is supposed to be derived from the conversion of urea into that product; but there always remains an excess of urea. It may be possible that ammonia as a normal product in normal quantity is the physiological stimulus of the ganglia, and its excess in the blood and excretions is due to the fact that they have become incapable of being impressed by it. Or perhaps there has been an increased demand for ammonia and the supply being derived from a wrong source and of improper quality is rejected as unfit for the purpose for which it is designed. At all events, whatever may be the reason of its excess, it must be taken as an evidence of its deficiency in proper amount, and construed as an indication for the administration of ammonia as a remedy.

This is, however, not the only indication for the use of ammonia in this disease. Every symptom demands it in the one form in which ammonia can be administered to obtain its fullest and most potent effect and devoid of harmful action, and that is in the form of the bromide of ammonium. This beautiful white, stable salt, bland and unirritating in its operation is derived from the combination in certain proportions of two fluid substances both volatile and both acrid and pungent. It seems as though specially designed to meet the "unknown element" of the congestive diseases. It is an

extraordinary fact in the history of medicine that this remedy has been so long consigned to obscurity; its potent and valuable properties, undiscovered and unknown. When it is assigned its proper rank, it will be found to tower above its fellows and will be recognized as one of the Sampsons of the *materia medica*. This suggests a suspicion that perhaps there may be many other obscure remedies whose virtues and therapeutic action are not correctly understood, and supplies ground for the hope that the medical millennium will yet dawn when there will be found to be a specific remedy for every disease.

The "damask cheek" is the invariable precursory sign of yellow fever and of typhus. It can be recognized at a glance. A short time ago a woman came to this place from a neighboring lumber camp and applied to a physician for medical help; she obtained a prescription and procured some medicine. I accidentally met her on the street and addressed her a few words in the way of greeting. Without asking her any questions, by a glance at her face and from the querulous, atonic tone of her voice I seized the clew to her condition. I knew that the medicine prescribed would not meet her case and that unless she received the right kind of treatment she would become seriously ill. I expressed my convictions to her employer who had brought her to town, and told him just how she felt and that there was but *one* remedy for her disorder. She returned to camp and her employer informed her of my statements. She used the remedies prescribed by the other physician that day without relief. In the evening her employer returned to town and desired me to prescribe for her. I gave the bromide of ammonium. The result was that the woman recovered entirely and the severe attack to which she was liable was warded off.* This is one case out of hundreds of the same nature and might and will yet be the history of thousands and tens of thousands of cases of what would otherwise be yellow fever, when the therapeutic

* In extenuation of the seemingly unethical course pursued in relation to this case, I desire to say, that while I strive to regulate my conduct by the spirit, I most heartily damn the letter of the Code.

use of this remedy and the true nature of this disease is thoroughly understood. It will be perceived too from this case that the right application of this remedy depends upon a proper appreciation of the condition to which it is applicable. This is the result of a correct comprehension of the signs presented by it, which is to be acquired only by observation and experience. Thus the administration of the remedy becomes an act of judgment, and not, as is usually the case in giving medicine, the perfunctory exercise of a mechanical habit. But if the condition cannot be appreciated, at least the methodical use of the remedy can be learned.

The sign derived from the peculiar color of the face denotes that the change of the ganglia has already commenced; that depressing agencies have been in operation for some time; that solar heat, fear, care, anxiety and sleeplessness have wrought their effect. This sign furnishes the first indication for treatment. *Obsta principiis* is the art of medicine in a nutshell. Here are the beginnings. Prescribe at once, procure rest for the sleepless patient who has been getting up every morning for a month or more more tired than when retiring. In rest there is recuperation. This is the true preventive. No need to wait until the ganglia are hopelessly depressed, the burning heat of hyperthermy is developed, the miseries of intense congestion have supervened or the tortures and hell of full-formed disease are at hand, either to make a diagnosis or begin treatment. But give the remedy and give it first, last, and all the time. Such allies as it needs will suggest themselves.

The part that solar heat plays as a depressing agent or as a factor in causing gangliasthenia is a problem in itself. In the regions where the congestive diseases most prevail the nights are nearly as warm as the days, and the inhabitants sleep, if they sleep at all, with but scanty covering. At best but a few hours of slumber are obtained. The nights are oppressively warm, the atmosphere sultry, and the earth and the houses heated up by the sun's rays render the close air still more stifling. Such nights occur at intervals in temper-

ate regions, three or four in succession and are followed by cooler ones. The languor caused by the sleeplessness due to the former is dispelled by the grateful and restful coolness of the latter. But increase of temperature is not the sole effect produced by the sun's rays. The electrical and other conditions of the atmosphere are changed and these alterations have also to be considered in their relation to the body as factors in producing depression. Without discussing these, however, at present the relation of the solar heat to the body may be stated thus: The atmosphere heated up by the sun's rays maintains the body nearly at its normal temperature. There is then no necessity for generating caloric within the body while nature is supplying external heat. But the individual, unmindful of the tropical heat enveloping him, consumes almost as much carbonaceous diet as would suffice for the calorification of his body in a temperate climate. Under these circumstances a struggle ensues between the powers of the body to expend the caloric derived from the ingested carbon and the power of nature to maintain the temperature of the body and prevent the expenditure of the body heat engendered within it. The struggle continues for a week or a month and at length the flagging powers of the body succumb, the ganglia become exhausted and disease supervenes. Recovery means restoration of the ganglia, and death results from their softening and disintegration.

I have never seen a case of yellow fever. To me there is no such disease. I read the descriptions in the books of a disease so named. I see the symptoms as they are given by different writers. I witness the post-mortem examinations and note the different pathological changes that have occurred in the body. I place the various specimens under the microscope and carefully study the alterations of minute structure. I have searched through many books in large libraries in pursuit of information on the subject, but everything has a different meaning for me than that set down. I read between the lines and know that the printed words tell a different story. And this is the story which I have endeavored to tell

here. The traditions of the profession are demolished by this laying bare the mystery surrounding yellow fever by one who has never seen a case of the disease. Perhaps the doctrine that "not practice but theory" will elucidate disease may yet prevail, and its application may furnish the solution of the many diseases whose nature is now so little understood.

Will their Eminences lend an attentive ear to the voice of one crying out in the wilderness of theories, "Here at last is the truth?" Will they submit to be guided by the light of my penny dip out of the bog of error in which they are floundering?

We shall see.—*Michigan Medical News.*

REPORT OF THE FIRST OUTBREAK OF TRICHINOSIS IN SYRIA.

BY S. MONSALLY, M. D., BEYROUT, SYRIA.

ON the 23d of last December, my friend, Dr. W. T. Van Dyck, read me a letter written from El-Kheyam, a small town of Northern Palestine, by a missionary there on a tour in that region.

The letter was dated December 20th, and contained a brief account of a sudden outbreak of disease among the Christian population of said town, by them attributed to eating the flesh of a wild boar, which was shot near the marshes of El-Hâleh (the waters of Merom), brought to El-Kheyam, and there sold.

The letter stated that up to date two hundred and twenty-five persons had been attacked.

From the description given of the symptoms, we were inclined to call the disease trichinosis; and the question was an interesting one to settle, from one point of view at least, namely, as proving that even wild animals may be the source of trichinæ—a fact not yet known, so far as I can gather. I therefore made up my mind to go and study this outbreak.

The exact date at which the animal was brought to El-

Kheyam is not known, but we can safely say toward the latter part of November. With the exception of a very few, all ate the meat raw, and it is evident that at that time the people there had an attack of generosity, for each one treated his friend, relative, or neighbor, to a mouthful of raw meat, only a few escaping a share.

The result was something fearful! two hundred and twenty-five men, women, and children, without any regard to age, were attacked and laid down, unable to move, and suffering excruciating pain. Some made the number of sufferers two hundred and forty-five, and some even more. This difference was perhaps due to the time of counting, as new cases were daily reported. I did not count them myself, but, taking the number of those I saw, and those seen by others, then making an allowance for error, I estimated them at about two hundred and fifty.

Dr. John Wortabet, who saw them later on and was the last to count them, reported them at two hundred and fifty-seven.

At the time of the attack the people invented several nonsensical stories to account for it, of which I mention only one, namely, that the boar had swallowed a snake, from which its flesh became poisoned; and it was also asserted that, a few years ago, the same thing occurred in a neighboring village, where a wild boar was eaten, forty or fifty persons being attacked in a similar way, and twenty of them dying. This may have been, for aught we know, another outbreak of trichinosis.

I was the first regular physician to reach El-Kheyam, arriving about four weeks after the pork was eaten, and even more than two weeks after the symptoms had appeared in most of the cases. The people being so ignorant, I encountered difficulty even in getting their own story up to the time I saw them. They seemed to forget everything but their present sufferings. "We are as you see us," was their favorite answer, while some used merely to say, "We have the disease." I suppose they wondered why on earth I did not feel

their pulses, and spare them all those questions, for people there think it is not their business to tell the doctor what is the matter with them; he must find out *everything* by simply feeling the pulse. Many also used to laugh at me because I asked every one whether the meat he or she ate was cooked or raw.

For several reasons I was unable to note down all the minutiae necessary to make up a full report, but I shall endeavor to state what I observed as faithfully as possible.

The number of patients I saw and treated was one hundred and thirty-five, and *every one* of them had eaten raw meat. After the lapse of a period varying between seven and twenty days, symptoms began to make their appearance, as nearly as I could ascertain, in the following manner:—

Severe headache, vertigo, colicky pains, vomiting, and purging (in some constipation). The appetite was lost or became capricious, and thirst was excessive. Next came loss of strength, severe muscular pains, tenderness, numbness, immobility of the joints, and fever. Œdema appeared in most cases in the eyelids first, then became general; but a few said the swelling appeared first in their feet.

Most of them had a rash, with intense itching; they also had profuse sweating and bloody urine, and a few complained of hoarseness.

At the time of my arrival the following were the symptoms: Excruciating muscular pains, tenderness, general stiffness, locked-jaw in some from intense pain, cedema either local or general, chilly sensations, and fever; also dyspnoea and cough in some.

The general appearance resembled that of Bright's disease, pale, waxy, and bloated.

The mental powers were perfectly clear, except in one case, an old man, who was already in collapse when first I saw him, and died soon after. Respiration was normal in some, though difficult and increased in others, and a few coughed.

The pulse, in the few cases where I noticed it, was frequent, weak, regular, short, and compressible. In some cases,

however, it was even difficult to feel the radial pulse, from excessive œdema. Temperature I could not record in every case, for obvious reasons; neither could I ascertain the highest point it had reached, as most of the patients had been ill for over two weeks. In one very severe case, which I saw fifteen days after its commencement, the temperature at 11 A. M. was 103° F.; in other cases it varied between 99° and 101° F. Perspiration was still copious. Thirst also excessive, and *appetite* good or capricious. Bowels were constipated in some and loose in others, while *urine* remained bloody. For want of necessary apparatus, I failed to get a chemical or microscopical examination of it.

Immobility and numbness remained in most, while many still suffered from intense itching in connection with an urticarial rash, mostly situated on the trunk and extremities. This, I believe, has not been mentioned before among the symptoms of this disease.

A few complained of *muscæ volitantes*, one of night-blindness (hemeralopia), and one woman had a miscarriage.

The symptoms of those who were convalescing were only those of debility, with slight stiffness of the limbs.

Young children had milder symptoms, due probably to imperfect digestion, followed by diarrhoea, thus expelling many of the parasites. As a rule, the symptoms were graver in those who ate freely, though some who ate but little suffered just as severely. This can be accounted for by the large number of trichina-cysts in the piece of flesh eaten. A man from a neighboring place called Hasbaya happened to be in El-Kheyam at the time the boar's flesh was sold. He bought the head, stomach, and intestines, but luckily escaped the disease, as did those who partook of his share, for these parts could not easily be eaten raw, and were therefore cooked before being served. A few, however, even of those who ate the meat roasted had mild symptoms, due in all likelihood to the survival of a few trichinæ.

Though this disease is often accompanied by complications, such as gastro-intestinal inflammation, peritonitis, pneumonia,

etc., I did not meet with any. In one case the patient had an attack of pleurisy, but whether it was secondary or accidental I cannot tell.

The ratio of deaths has been very low, indeed; thus far only six have died. Two of them I saw, and the cause of their death was mere exhaustion, for both of them were quite old.

At first the diagnosis of trichinosis could not be settled beyond all doubt, because we could not get a piece of flesh for microscopical examination; still we were almost positive that it could be nothing else, considering the history and symptoms, besides excluding other diseases which closely resemble the one in question, as typhoid fever, acute rheumatism, etc. Subsequently, however, Dr. Wortabet succeeded in procuring a piece of flesh from the body of a woman who died, and the trichinae being demonstrated under the microscope, the diagnosis was settled beyond question.

Some of the trichinae were spirally coiled as beautifully as could be, but none were encapsuled; evidently the patient died too soon for that to have taken place.

The treatment I adopted was to meet symptoms, for unfortunately this is one of the diseases whose cause we know, but as yet cannot influence without placing the life of the patient in jeopardy.

Niemeyer says that benzine has not been given a fair trial, and believes it is efficient, but I could not get any here to try. First of all, I gave calomel to expel what parasites might have remained in the intestinal canal. I administered carbolic acid freely, simply for its antiseptic properties, or it may be because I had a large quantity of it. On the same principle I used salicylic acid. Quinine was given as an antipyretic and antiperiodic (the locality being malarious), and preparations of iron for those who were convalescing. I also gave iodide of potassium, out of mere curiosity, and used stimulants but very little, only when indicated by feebleness of the first sound of the heart.

After a stay of ten days I returned home, leaving my

patients doing quite well, with very few exceptions. Whether this was due to the effect of medicine or not, I am not ready to say; all I can maintain now is that medicine alleviated the symptoms, and placed the patients in a better condition to bear the effects of this disease.—*New York Medical Record*.

Removal of a Double-Pointed Needle from the Submaxillary Connective Tissue, by the aid of Manipulation.

BY SAMUEL KOHN, M. D., NEW YORK.

MISS M. L——, aged seventeen, presented herself in the Throat class of the New York Dispensary, June 1st, with the following history: She is employed in running a patent embroidering machine; while changing the needles on the morning of the above date, she placed one in her mouth until such time as its use might be required. The needles, one of which she brought to me as a sample, are short, being only about three-quarters of an inch in length, sharp at both ends, with the eye placed midway between the two points. She states that, soon after taking the needle into her mouth she felt a sharp pricking sensation near the root of the tongue, and that the needle disappeared, working its way into the sublingual connective tissue. Two physicians who were successively consulted, examined the mouth, and not finding any evidences of the truthfulness of the girl's statement, declared that she either swallowed the needle or that she was mistaken. On examining the floor of the mouth carefully, I found, opposite the buccal side of the second molar tooth, a minute perforation of the mucous membrane, surrounded by a narrow white rim of superficial ulceration; this the girl declared to be the point at which the needle entered. With two fingers in the floor of the mouth, and external counter-pressure, the position of the foreign body could not be localized. Thereupon, the unsharpened end of a lead pencil was pressed against various points of the right submaxillary region, and the patient told to say when the point of the needle pricked the tissue; she finally felt a piercing pain in the subparotid

region. Bimanual manipulation—two fingers of the right hand in the floor of the mouth, and three fingers of the left, at this point externally continued for over half an hour, finally succeeded in bringing the point through the mucous membrane opposite the buccal side of the second bicuspid tooth; but not enough of the needle appearing to offer a hold, I was compelled to release the grasp I had of the tissues and obtain other finer instruments. On returning to the patient, it was found that owing to several deglutitory movements, the needle had again disappeared. Bimanual manipulation for over half an hour again succeeded in bringing through the mucous membrane of the floor of the mouth the point of the needle in the same place as before. Dr. Valentine, the house physician, was now called to my assistance, and while I pressed with full force upward and inward against the right submaxillary tissue, Dr. Valentine, with a pair of polypus forceps, attempted to seize the point of the needle, and after several trials succeeded in extracting this troublesome foreign body. My apology for sending this case to the *Record* lies, 1st, in its uniqueness; 2d, in the evidence it affords of the value of a careful examination and of manipulation. Had a cutting operation for the recovery of this delicate foreign body been performed, the chances are, I venture to say, against the probability of its having been found, not to speak of the many unpleasantnesses attending such an operation.—*New York Medical Record*.

HOW ARSENIC POISONS.

MOST persons who hold any theory concerning the toxic action of arsenic, still believe the doctrine first propounded by Liebig. Arsenious acid, according to this theory, has a great affinity for albuminous substances, and tends to form with them solid compounds. In other words, the arsenic coagulates the soluble albumen. In this condition it cannot take part in the vital functions, and hence these functions cease. In this way the so-called corrosive action of arsenic on the

coats of the stomach was explained, although it is well known that arsenious oxide has at most only a feeble, caustic action. This theory, which was originally propounded to explain the poisonous action of both arsenious oxide and corrosive sublimate, is wholly false, as far as the former of these is concerned. By experiment it is found that solutions of albumen are not coagulated when treated with arsenious compounds, as they are when treated with corrosive sublimate. In fact, arsenious acid does not have a precipitating effect on any of the liquids of the body, stronger than that of carbonic acid, and yet carbonic acid is not poisonous. Liebig himself, later, saw the fallacy of his theory, and renounced it, without, however, substituting another in its place. The fact that arsenical poisoning, with the usual stomach symptoms, could be produced by dropping arsenical compounds into the eye without hurting the eye itself, was alone fatal to the early Liebigian theory. Late investigations, carried on by Binz and Schultz, (*Archiv fuer Exper. Path. and Pharma.*), have developed a new and much more rational theory. *Post Mortem* investigations have shown that those tissues which specially come in contact with the oxygen of the blood, and utilize it, are those which suffer most in arsenical poisoning. This is especially true of the glandular protoplasm. The neutral salts of arsenic acid are even more poisonous than the corresponding salts of arsenious acid. By the tissues of the body, arsenious acid is oxidized to arsenic acid, and arsenic acid is also reduced to arsenious acid. Any kind of albumen will affect the latter process, while the former is brought about by the albumen of animals and plants only. These facts were proved by experiments. Arsenic acid was reduced, when treated at the temperature of the body, with egg albumen and the fibrin of warm blooded animals. Fresh brain substance had the same effect. The tissues of the pancreas of the liver, and the undecomposed protoplasm of plants, not only reduced arsenic to arsenious acid, but also produced the opposite effect. As a result of a long series of experiments, it is concluded that the destructive effects of arsenical compounds on the system are

due to the violent agitation imported by them to the oxygen atoms of the albumen molecules. It is this molecular shock which produces such havoc in the tissues, and this shock is the result of the unnatural activity of the oxygen atoms alternately oxidizing and reducing the arsenical salts. Nitrogen compounds act much in the same way. Indeed the similarity between nitrogen and arsenic extends to many particulars. For instance; nitric oxide is extremely poisonous. It takes oxygen from the tissues, and is converted into hyponitric acid. This latter is a powerfully oxidizing substance. It attacks other tissues, giving up its oxygen and becoming reduced again to nitric oxide. This theory is certainly very ingenious, and the evidence supporting it is good. The authors, indeed, appear to have made out their case. At least, the theory which they advance is so far superior to any other, that we feel like accepting it, if not finally, nevertheless provisionally.—*Chicago Medical Review.*

Treatment of Blindness and Deafness Resulting from Cerebro-Spinal Meningitis.

BY EDWARD C. MANN, M.D.

THE blindness and deafness resulting from cerebro-spinal meningitis have generally been considered by the profession as incurable. We have been led to the study and investigation of this class of cases by a very fortunate result obtained recently in a case of blindness, which will be detailed further on, in which, by patience and perseverance in the treatment, sight was finally restored; and the results gained in this case, by the use of the constant current, have let us to believe that these cases are not all incurable.

I was much surprised when a patient of mine told me recently that an eminent oculist told her that she could allow an electrician to use the induced or faradic current for her child who was deaf as a result of cerebro-spinal meningitis. Naturally enough she got nothing but a very disagreeable effect, with no benefit whatever. There is a great difference between the chemical and catalytic effects of the galvanic and

faradic current. The former current possesses them in a very high degree—the latter has no chemical action in solution of salt, water, solutions of albumen, etc. Ten years ago I commenced the study of electro-therapeutics, and can to-day, from almost daily experience with both currents in nervous diseases, state positively my firm belief in what Niemeyer stated in 1870, that, “in the constant current we have a means more powerful than any other of modifying the nutritive conditions of parts that are deeply situated.”

The most interesting case was that of blindness so complete that all the oculists of eminence in the country to whom the patient's parents had taken her had pronounced the case absolutely incurable.

My treatment consisted in hypodermic injections of nitrate of strychnia; phosphorus and cod-liver oil internally, and the constant current of electricity applied several times a day at first, for a few moments each time. I soon improved the general health, which was much impaired, but worked carefully on the case for some weeks with no appreciable benefit to the sight, so far as I could discover. One day, about eight weeks or more after her admission here, I was applying the constant current through the optic nerve, she exclaimed: “Dr. Mann, I can see a flash of light.” Up to this time the retina had not responded at all to the constant current. She described the light as appearing like heat lightning. From this time on there was a steady improvement, and at the end of about six months treatment I sent my patient home so well that she could see to thread a cambric needle. My idea of the pathology of this case was that we had optic nerves bound down by an organized exudation and that this disappeared, and that the atrophic and degenerative channels also disappeared as the effect of the constant current of electricity.

We believe that the results of our investigation in this direction will lead us to be able to class blindness and deafness resulting from cerebro-spinal meningitis among the curable forms of diseases of the nervous system. There are also chronic congestive states of the brain which tend to mental

disorder if not checked, where, in my opinion, we have in the constant current of electricity the very best therapeutical means of cure. The vessels of the dura mater and pia mater and of the brain itself are habitually dilated in these cases and we have to get a tonic contraction of these vessels if we are to cure our patient. By using the positive pole at the level of the first cervical vertebra and the negative at the level of the superior ganglion of either of the cervical sympathetic nerves we can get this result. Two things must be observed in order to be successful: 1st, Long continued treatment; and, 2nd, The avoidance of an injuriously strong current. It is well to use a slowly interrupted galvanic current to promote vascular contraction.—*Complete in N. Y. Med. Gaz.*, Dec. 4, 1880.

Trance and Trancoidal States in the Lower Animals.

THESE peculiar phenomena form the basis of an article by Dr. George M. Beard in the *Journal of Comparative Medicine and Surgery*, April, 1881, and the following are his summaries: Trance is a concentration of the nervous activity in some one direction. It is a state of degrees and gradations all the way from full trance, in which there is absolute suspension of the nervous activity in every direction except one, and a corresponding concentration of activity in an exceedingly narrow and limited phase, as in apparent death and long-continued rigidity, and so-called trance coma, to the mildest and most transient dazing and bewilderment. Trance, as it exists in lower animals, whether quadrupeds, fish, or insects, or in forms of life in which the nervous system exists, is the same condition precisely as trance in human beings, and is explained by the same theory. Through the whole range of phenomena, it is obedient to the same natural law, which is now no longer mysterious. It is explained as satisfactorily as any of the great laws of nature, certainly as any in the domain of biology. The state of trance has indeed in many aspects, already obtained the predictable stage—the last and best test of the organization of any science, where

we can tell beforehand what will happen with certainty in many instances.

The only difference between the milder trancoidal states, so often observed in animals and in men, as in cases of intellectual absent-mindedness and the temporary loss of presence of mind, and the full trance, in which the animal or person is absolutely unconscious for minutes or hours, or days, or sometimes years, is a difference of degree rather than of kind, and there can be no scientific study of the subject which fails to recognize this fact. These trancoidal states bear much the same relation to full trance that epileptiform and neurasthenic or neurasthenoidal states, or insanoidal states bear to epilepsy or neurasthenia or insanity.

The methods or processes of inducing trance and trancoidal states in the lower animals and in man are infinite, and there is no one of these methods that are best known which can be said to have any special or pre-eminent virtue over the other, except of convenience and degree. The philosophy in all these processes and manœuvres is to so alter the nervous equilibrium as to produce concentration of the nervous forces in some one direction, with corresponding cessation of nervous activity in other directions, and this can be accomplished by acting on the nerves of general sensation or of special sense, with profound excitation of emotion of fear and induction of physical helplessness, as when a horse is cast on his side so that it is impossible for him to rise, or a hen is securely tied by the feet, while at the same time the emotions of fear are energetically acted upon, and the nerves of sensation are effected by manipulation, or by fixing the look on the eyes. The simple excitation of the emotion of fear is itself, without any physical accessories, the most powerful of any single exciting cause, in animals or in men. When, for example, a horse is in a stable that has caught fire, he is often unable to move; he is then in a condition of trance, and the paralysis of motion which subjects him to the danger of burning to death rather than escape, is one of the symptoms of the trance thus induced. The temporary paralysis of a horse unable to

cross a track or move in any direction when a train of cars is approaching, illustrates the same principle. Human beings when surprised, in the same way, as when an alarm of fire takes place in a crowded building, are likewise entranced, and exhibit the same phenomena. Of the special senses, that of sight is decidedly the best to act upon, in order to induce the trance or trance-like state. All the other senses may be similarly utilized; as the hearing, when the animal listens to music, or to any monotonous sound, or the falling of water, even the ticking of a clock or watch; the sense of smell, as when some powerful and agreeable odor is brought near to the nostrils. All these experiments apply with equal force to the higher as well as to the lower animals.

ANÆSTHESIA.

PAUL BERT has been making experiments with anæsthetics on the dog, mouse and sparrow, and claims to have arrived at remarkable results. The operative procedure were as follows: In the canula of a tracheotomised dog, he introduces a Y shaped tube, the branches of which are furnished with stop-cocks opening reversedly; by one enters air containing a known quantity of the anæsthetic, by the other the products of expiration pass out. He has found that for animals of the same race, of any weight or strength, whatever, the portions of the anæsthetic to the air is always the same at the time of anæsthesia, and that death is produced when the proportion reaches a certain invariable figure. In other words, that the "maniable zone" in a given quantity of air is fixed. The dog requires one hundred litres of pure air and thirty-seven grammes of ether to cause anæsthesia, seventy-four grammes of ether being required to produce death; of chloroform, the proportions are fifteen grammes for anæsthesia, thirty grammes for death; bromide of ethyl requires twenty-two grammes for anæsthesia, forty-five for death; methylene requires thirty grammes for anæsthesia, forty-five grammes producing death; chloride of methyl in the proportions of

twenty-one cubic centimetres of the gas to the hundred cubic centimetres of air will cause anæsthesia, while forty-two cubic centimetres will cause death. As anæsthesia is ordinarily produced by a compress or sponge soaked with the drug employed and there is no method of determining the amount given, it would therefore be better to have some certain means of determining the quantity given. A practical application of these circumstances might be made when the "maniable zone" for man is known.—*Chicago Medical Review*.

DIFFUSE SARCOMATA

IN a boy fourteen years old, were recently reported to the Dublin Pathological Society (*British Medical Journal*, March 12, 1881.) The patient had been admitted to the Richmond hospital a year previous, for a "lump" on the front of the tibia which was supposed to be a chronic abscess, but six months after, the limb was amputated because of the "lump" evidently being sarcomatous. Last November he was attacked by pneumonic symptoms, but which were recognized as due to sarcoma. The patient was attacked by a violent toothache, followed by the appearance of a tumor near the right temple. Pain in the stump, followed by a fullness about the great trochanter, made its appearance, and a tumor appeared in the epigastrium. The patient sank rapidly, dying January 21st. On the autopsy the left lung was collapsed, several pedunculated tumors being attached to it; still larger masses of new growth being found in the substance of the right lung itself. There was no recent pleurisy, but old adhesions bound down the right lung. The falciform ligament of the liver was the seat of a similar neoplasm, but the organ itself, as also the kidneys, was free from disease. Neoplasms similar to those of the lungs were found in the pancreas; the femur was extensively implicated. The neoplasms were good examples of the round-celled and spindle-celled sarcomata.—*Chicago Medical Review*.

JUGLANS NIGRA IN DIPHTHERIA.

DR. C. R. S. CURTIS, of Quincy, Ill., reports in the *Boston Medical and Surgical Journal* of March 10th, the results of his trials of black walnut leaves in the treatment of diphtheria. He was led to employ them by reading of Néaton's success with the leaves and bark of the European walnut as a topical application in malignant pustule. Not having access to the European species, he substituted for it a strong decoction of the leaves of the native black walnut in a bad case of diphtheria, to be used as a gargle, and to his agreeable surprise, with very good effect. Since then he has used the remedy in about thirty cases, many of them bad ones, and all have recovered, a result he is inclined to attribute in great part to the walnut decoction. He has used the remedy in the form of a preventative, in spray with the atomizer, as well as in a gargle. Besides the leaves he employs the hulls of the green walnuts, which make the decoction still stronger, and he finds it not painful or especially disagreeable to his patients. The remedy is so readily accessible to most physicians that further reports may be expected as to its utility in diphtheria and allied troubles.—*Chicago Medical Journal*.

BOOK NOTICES.

A PRACTICAL TREATISE ON SURGICAL DIAGNOSIS, designed as a manual for practitioners and students, by Ambrose L. Rauney, A. M., M. D., Professor of Anatomy, and late lecturer on the surgical diseases of genito urinary organs and minor surgery in the Medical Department of the University of the City of New York.—William Wood & Co., 27 Great Jones st., New York.

THE DISEASES OF CHILDREN, a practical and systematic work for practitioners and students, by Henry Day, M.D., author of "Headache," member of the Royal College of Physicians of London.—Presley Blackiston, No. 1012 Walnut st., Philadelphia.